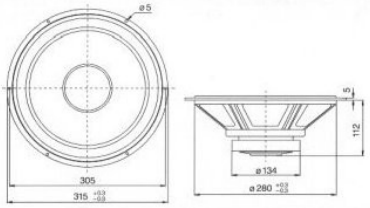
Peerless

# 12" WOOFER

## 831857

315 SWR 39 134 PPX AL 4L 8Ω




New 12" woofer in the CC line. It has the same long voice coil as the 10" 831727 but to obtain optimal parameters with the extra heavy moving system a new and even heavier magnet has been used. It has also rubber surround and thick polypropylene cone. Not less than 1.3 kg magnet and of course short circuiting ring and all the well-known features of the CC line.


## 12" WOOFER

**831857**

315 SWR 39 134 PPX AL 4L 8Ω


nov. 1991

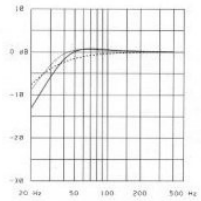
| Thiele Small parameters: | | | Free air | Common | Baffled |
|---|---|---|---|---|---|
| Nominal impedance | Znom | (Ω): | | 8.0 | |
| Minimum impedance/at freq. | Zmin | (Ω/Hz): | | 6.3/124 | |
| Maximum impedance | Zo | (Ω): | | 46.9 | |
| Dc resistance | Re | (Ω): | | 5.5 | |
| Voice coil inductance | Le | (mH): | | 2.8 | |
| Capacitor in series with 8Ω (For impedance compensation) | Cc | (μF): | | 24 | |
| Resonance frequency | fs | (Hz): | 24.0 | | 22.9 |
| Mechanical Q factor | Qms | : | 3.72 | | 3.90 |
| Electrical Q factor | Qes | : | 0.49 | | 0.52 |
| Total Q factor | Qts | : | 0.44 | | 0.46 |
| F (Ratio fs/Qts) | F | (Hz): | | | 50 |
| Mechanical resistance | Rms | (kg/s): | | 3.25 | |
| Moving mass | Mms | (g): | 80.2 | | 88.2 |
| Suspension compliance | Cms | (mm/N): | | 0.55 | |
| Effective cone diameter | D | (cm): | | 25.7 | |
| Effective piston area | Sd | ($cm^2$): | | 520.0 | |
| Equivalent volume | Vas | (ℓ): | | 210.0 | |
| Force factor | BL | (N/A): | | 11.6 | |
| Reference Voltage Sensitivity Re 2.83V Im at 124 Hz (Calculated) | | (dB): | | | 89.3 |

| Magnet and voice coil parameters: | | | |
|---|---|---|---|
| Voice coil diameter | d | (mm): | 39 |
| Voice coil length | h | (mm): | 26.0 |
| Voice coil layers | n | : | 4 |
| Flux density in gap | B | (T): | 0.99 |
| Total useful flux | Φ | (mWb): | 1.52 |
| Height of the gap | hg | (mm): | 8 |
| Diameter of magnet | dm | (mm): | 134 |
| Height of magnet | hm | (mm): | 22 |
| Weight of magnet | | (kg): | 1.28 |

| Power handling: | | |
|---|---|---|
| Longterm Max System Power (IEC) | (W): | 220 |
| Max linear SPL (rms)/by power | (dB/W): | 110/170 |
| Frequency range for test signal: | | 20-2000 Hz |

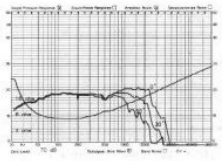
Normal programme material signal with a crest factor of 6dB (IEC 268-5) is used in both tests

**Boxsimulation.**

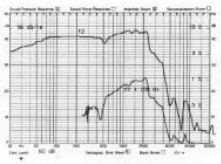



| | V(B) L | f(3) Hz | f(B) Hz | f(C) Hz | Qts | Lp cm | Fb Hz | Dp cm | |
|---|---|---|---|---|---|---|---|---|---|
| ——— | 60 | 35 | 26 | 44 | .91 | | | | C |
| - - - - - | 120 | 30 | 21 | | | 12.0 | 18 | 5.0 | B |
| ..... | 400 | 34 | 21 | 26 | .55 | | | | C |

**Frequency response and impedance curve.**



**Differencetone distortion.**



**Harmonic distortion.**